Notice of Allowability	Application No.	Applicant(s)	
	10/707,091	BAULDOCK, GERALD	
	Examiner	Art Unit	
	R. Alexander Smith	2859	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *a telephonic conversation with Mr. Gerald Bauldock on March 4, 2005*.

2. ☒ The allowed claim(s) is/are *9-11*.

3. ☐ The drawings filed on _____ are accepted by the Examiner.

4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☐ All b) ☐ Some* c) ☐ None of the:
      1. ☐ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

6. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☒ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☒ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☒ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

EXAMINER'S AMENDMENT

1. An Examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to Applicant, an amendment may be filed as provided by 37 CFR 1.132. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

2. Authorization for this Examiner's amendment was given in a telephonic interview with Mr. Gerald Bauldock, Sr. on March 4, 2005.

3. The application has been amended as follows:

In the claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claims 1-8 have been canceled.

9. (New) A device for demonstrating the relationship between a right triangle, its sides, angles, and trigonometric functions, said device comprising:

a horizontal ruler having a left portion with measuring indicia and a right portion with measuring indicia, a circular plate showing 360 degrees of the circle being attached to the horizontal ruler at an intersection of said left and right portions of said horizontal ruler;

a vertical ruler having an upper portion with measuring indicia and a lower portion with measuring indicia, a sliding attachment bracket being attached to the vertical ruler at an intersection of the upper and lower portions, said sliding attachment maintaining said vertical ruler at a right angle to said horizontal ruler and allows said vertical ruler to be slidably moved to said left and right portions of said horizontal ruler;

a pivoting ruler having measuring indicia and an end rotatably attached at said intersection of said horizontal ruler such that the pivoting ruler can rotate 360 degrees;

wherein said pivoting ruler can rotate to different angles using a set increment of degrees all the way around the circle and wherein said vertical ruler can be moved to intersect the pivoting ruler at a location along said pivoting ruler other than at said end of said pivoting ruler.

10. (New) The device of claim 9, wherein

said measuring indicia of said left portion of said horizontal ruler comprise negative numbers and wherein said measuring indicia of said right portion of said horizontal ruler comprise positive numbers, and wherein

said measuring indicia of said lower portion of said vertical ruler comprise negative numbers and wherein said measuring indicia of said upper portion of said vertical ruler comprise positive numbers.

11. (New) The device of claim 9, wherein said device is adapted to allow data to be collected which can be used to plot curves for trigonometric functions.

In the specification

Paragraph 0003 has been replaced by the following paragraph:

-- Across the nation, schools are going through a major reform in their math and science curriculum to bring education standards up to par. The facts show that there is an achievement gap between various individuals and groups in mathematics and science as indicated in 1999, when the latest National Assessment of Education Progress (NAEP) test was administered. The partnerships between government agency, industry, academia and private organizations are trying to address these issues along with many others. This invention provides a method for teaching the geometric concepts of a right triangle and trigonometric functions. --

Paragraph 0015 has been replaced by the following two paragraphs:

-- Referring to Fig. 1, the device includes a horizontal ruler, a vertical ruler, a pivoting ruler and a circular plate. The horizontal ruler having a left portion with measuring indicia and a right portion with measuring indicia, and the vertical ruler having an upper portion with measuring indicia and a lower portion with measuring indicia. The vertical ruler being attached by a sliding attachment bracket to the horizontal ruler such that the vertical ruler can be slidably positioned anywhere along the length of the horizontal ruler and to maintain the vertical ruler at a right angle. The sliding attachment bracket is located at the intersection of the upper and lower portions of the vertical ruler. The pivoting ruler includes an end attached to a pivoting point on the horizontal ruler such that the pivoting ruler can rotate 360 degrees. The pivoting point is located at the intersection of the left and right portions of the horizontal ruler and a circular plate showing 360 degrees of the circle is also attached to the horizontal ruler at the pivoting point so that the pivoting ruler can rotate 360 degrees around the circular plate. Fig. 1 shows the measuring indicia of the lower and upper portions of the vertical ruler including negative and positive numbers, respectively, and the measuring indicia of the left and right portions of the horizontal ruler including negative and positive numbers, respectively.

By sliding the vertical ruler to different positions along the horizontal ruler and revolving the pivoting ruler to different angles (θ), the height (Y) of the vertical ruler where it intersects the pivoting ruler, the length (X) of the of the horizontal ruler where it intersects the vertical ruler, and the length (R) of the pivoting ruler where it intersects the vertical ruler can be measured. The trigonometric functions can then be calculated by their relationship with the measured values of X, Y, R and θ. For example, sin θ = Y / R and cosine θ = X / R. The sin and cosine functions and other trigonometric functions can be calculated and plotted (e.g. θ vs. Y/R) by varying the position of the rulers with respect to each other. --

Reasons for Allowance

4. The following is an examiner's statement of reasons for allowance of claims 9-11.

For independent claim 9, the prior art of record does not disclose or clearly suggest a device comprising a horizontal ruler having a left portion and a right portion with a circular plate showing 360 degrees of the circle being attached at an intersection of said left and right portions, a vertical ruler having an upper portion and a lower portion, a sliding attachment bracket being attached to the vertical ruler at an intersection of the upper and lower portions, said sliding attachment allows said vertical ruler to be slidably moved to said left and right portions of said horizontal ruler; a pivoting ruler having an end rotatably attached at said intersection wherein said pivoting ruler can rotate to different angles using a set increment of degrees all the way around the circle and wherein said vertical ruler can be moved to intersect the pivoting ruler in combination with the remaining limitations of the claim.

Claims 10 and 11 are allowed due to their dependency on allowed claim 9.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Examiner's Comment

5. The original specification in combination with the drawings does provide support for the above modification made to the specification and to the claims. For example, in paragraph 0017 the applicant discloses the pivoting ruler starting at 0 degrees is moved at increments of 15 degrees wherein the pivoting ruler can move all the way around the circle 360 degrees. The specification then states that the vertical ruler is moved so that it is *always intercepting* the pivoting ruler and then talks about the pivoting ruler and values for each of the four quadrants.

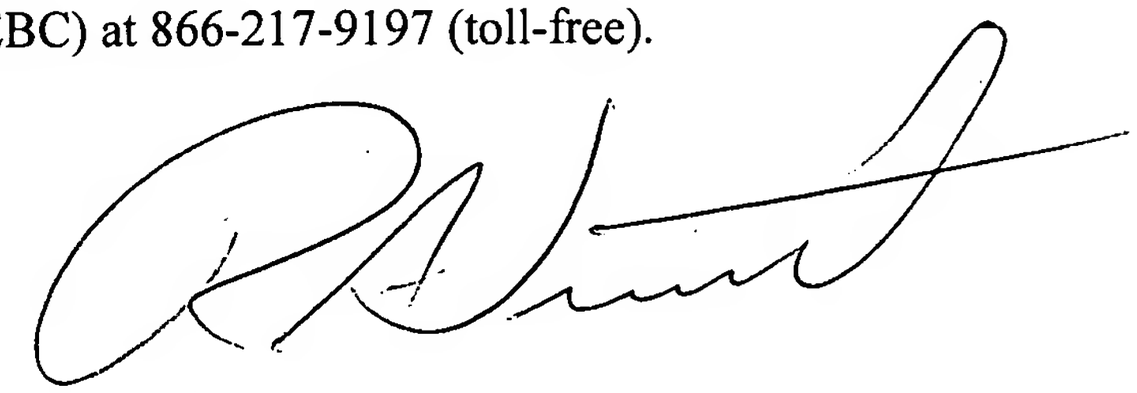
Conclusion

6. The prior art made of record is considered pertinent to Applicant's disclosure. The prior art cited in PTO 892 disclose related devices.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to R. Alexander Smith whose telephone number is 571-272-2251. The examiner can normally be reached on Monday through Friday from 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego F. Gutierrez can be reached on 571-272-2245. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



R. Alexander Smith
Patent Examiner
Technology Center 2800

RAS
March 4, 2005